

WHAT IS CLAIMED IS:

1. A method of manufacturing a semiconductor device, comprising:
 - providing a substrate having a first electrode thereon;
 - 5 dispensing a sealing resin to a region of the substrate that does not include the first electrode;
 - providing a semiconductor chip having a second electrode on a peripheral portion of a front surface of the semiconductor chip;
 - placing the semiconductor chip over the substrate so that the front surface of the 10 semiconductor chip faces the sealing resin;
 - applying a pressure to a peripheral portion of a back surface of the semiconductor chip so that the first and second electrodes come into a contact; and
 - applying a pressure to a central portion of the back surface of the semiconductor chip so that the sealing resin extends in a space between the substrate and the front surface of the 15 semiconductor chip.

2. The method of claim 1, wherein the sealing resin comprises fillers.

3. The method of claim 1, wherein the first electrode or the second electrode has a 20 protruding shape.

4. A method of manufacturing a semiconductor device, comprising:

providing a substrate having a first electrode thereon;

dispensing a sealing resin to a region of the substrate that does not include the first

electrode;

providing a semiconductor chip having a second electrode on a peripheral portion of a front surface of the semiconductor chip;

placing the semiconductor chip over the substrate so that the front surface of the

5 semiconductor chip faces the sealing resin;

applying a negative pressure to a central portion of a back surface of the semiconductor chip and a positive pressure to a peripheral portion of the back surface of the semiconductor chip so that the first and second electrodes come into a contact; and

applying a positive pressure to the central portion of the back surface of the
10 semiconductor chip so that the sealing resin extends in a space between the substrate and the front surface of the semiconductor chip.

5. The method of claim 4, wherein the sealing resin comprises fillers.

15 6. The method of claim 4, wherein the first electrode or the second electrode has a protruding shape.

7. The method of claim 4, wherein the applying of the negative pressure comprises an air suction.